Tuning Pressures with the Manual and Auto Bypass Valves

___1) Each chiller has a manual bypass valve and an automatic bypass e-valve to regulate supply pressure
___2) Bypass valve must be tuned such that automatic bypass (steered by PID loop) can regulate pressure
___3) With all e-valves at nominal positions: open bypass valve until pressure gauge reads approx. 26 psi (up to 27.5 psi with e-valves closed)
___4) Check automatic bypass: e-valve should be opened 20-30%
___5) Application 1: High pressure problems during chiller startup
___a) Sometimes chiller does not start due to over-pressure
___b) Pressure to chiller has to be throttled by opening manual bypass until chiller starts
___c) Manual bypass has to be closed back to working point

___6) Application 2: Problem to re-establish ISL flow
___a) ISL flow (esp. East) keeps tripping on COT face overpressure
___b) Reduce supply pressure by opening manual bypass valve slightly (a few millimeters), until it falls out of the PID loop. This should facilitate the job of re-establishing flow.
___c) Carefully close manual bypass valve afterwards until automatic bypass kicks in

Date/Time _____

Name _____

Signed _____